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ABSTRACT

In the hands of inspired teachers, computers can provide opportunities for creativity and interaction that add new excitement to learning. PowerPoint and HyperStudio are just two examples of computer software that are frequently used by students to share knowledge and develop communication skills using multimedia. Publishing their work with the computer motivates students to proofread and edit, enabling students with weak skills to polish their work. Animation is also gaining in popularity in classrooms as teachers discover inexpensive software and digital cameras can be used to present student projects. Using software like Animagic Gif Animator (Right to Left Software) to animate graphics or digital cameras to create clay animation, teachers and students can work together to dramatize stories and build transitions from pictures to text. Working with animation requires children to use critical thinking skills to analyze characterization, build visual discrimination, think spatially, and determine orientation of objects and sequence of events. Writing new dialogue or captions to accompany an animation requires students to work with language to produce brief description captions or engaging dialogue. Some suggestions for classroom activities involving animation are: create the animated story of an historical event with captions to reinforce and check comprehension; create animations from time-lapse photos to illustrate a concept or process; animate a virtual tour to illustrate a concept or to develop knowledge; create animated sequences and add to PowerPoint stories that require users to choose what happens next; work in groups to create animations of book chapters to show understanding of plot and sequence; and work in collaborative groups to develop a story board, record narration, and select and insert sound effects for any story. (Contains 13 references.) (NKA)

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Using Animation and Interactivity to Enrich Reading and Writing Activities

By
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Using animation and interactivity to enrich reading and writing activities

Technology has traditionally been used to reinforce reading and writing skills with the use of drill and practice, word processing, and tutorials. Research conducted on the impact of computers on student learning indicates that computer technology, when used correctly, is worth the expense and effort (Apple Computer, 1995; Coley, Cradler, & Engel, 1999; Kulik & Kulik, 1991; Sivin-Kachala & Bialo, 1999). Other studies support the effectiveness of computer technology in developing skills, acquiring knowledge, and developing creativity and self-expression (CEO Forum, 1999; U.S. Congress, 1998). Margo, Leinart, and Scruggs (1999) demonstrated the power of computer technology in providing repetition and monitoring student performance.

Drill and practice software can effectively increase language arts skills but this practice often accompanied by little involvement and creativity on the part of the learner (Marcus, 2001). In fact, some critics claim drill and practice software such as the Reader Rabbit programs decreases the creative thinking of students (Oppenheimer, 1997). Fortunately, computers can offer more than reinforcement and practice. Computers are no more effective or less effective than the teacher making decisions about how to use them. In the hands of inspired teachers, computers can offer even more than repeated readings, never-

tiring practice and immediate feedback. They can provide opportunities for creativity and interaction that add new excitement to learning.

Microsoft PowerPoint and HyperStudio are just two examples of computer software that are frequently used by students to share knowledge and develop communication skills using multimedia. In many classrooms, students are using presentation software to develop skills by collaborating, creating, editing, communication, and evaluating. Publishing their work with the computer motivates students to proofread and edit, enabling students with weak skills to polish their work for public viewing (MacArthur, 1999).

Animation is also gaining in popularity in classrooms as teachers discover inexpensive software and digital cameras can be used to present student projects. Using software like Animagic Gif Animator (Right to Left Software) to animate graphics or digital cameras to create clay animation, teachers and their students can work together to dramatize stories and build transitions from pictures to text. Any parent or teacher of young children can describe the ease in which children take an inanimate object and create a dialog or story. Contrast that easy facility with the response of older students asked to write a creative story. Animation can be used to provide a bridge between concrete and abstract thinking.

Working with animation requires children to use critical thinking skills to analyze characterization, build visual discrimination, think spatially, and determine orientation of

objects and sequence of events. Working in groups to illustrate their own stories or a favorite story, children get immediate feedback on their interpretation of the story. They must listen and collaborate to get different viewpoints about what happens in the story or what the characters look like.

Animation offers a unique method of teaching a variety of skills in language arts as well as other subject areas (Cook, 1999). Working with animation also allows children who are not verbally fluent to work in the kinesthetic mode to express their ideas. And best of all, it provides a platform for active student learning and performance. Students find it almost impossible to stay disengaged when animating stories. Even the quietest child can be fully engaged in animation and create expressive stories with very few words.

Writing new dialog or captions to accompany an animation requires students to work with language to produce brief, description captions or engaging dialog. Students are required to organize, sequence, describe, edit, and rewrite. Recording and editing sound to accompany the animation adds even more texture to the project and requires students to think critically about auditory as well as visual impact.

Suggestions for classroom activities involving animation:

- Create the animated story of an historical event with captions to reinforce and check comprehension
- Create animations from time-lapse photos to illustrate a concept or process. Examples: How shadows change throughout the day or how a cocoon changes into a butterfly.

- Animate a virtual tour to illustrate a concept or to develop knowledge
- Create animated sequences and add to PowerPoint stories that require users to choose what happens next
- Work in groups to create animations of book chapters to show understanding of plot and sequence
- Work in collaborative groups to develop a storyboard, record narration, select and insert sound effects for any story
- Write the sequential steps in a everyday task and then animate the sequence to show how to complete the task
- Create an animation to show how something changes shape or color because of a chemical or physical reaction
- Create animated sequences to show different possible reactions a character might have to a problem to reinforce motivation in character analysis
- Create an animation for the school Web site to illustrate a theme or message. For example, what animation would tell the story that smoking is bad for your health?

References

Animagic Gif Animator V. 1.20. Toronto: Right to Left Software, Inc.

Apple Computer. (1995). Teaching, learning, & technology: A report on 10 years of ACOT research [PDF document]. Retrieved June 7, 2000, from the World Wide Web: http://www.apple.com/education/k12/leadership/acot/library.html

CEO Forum. (1999). Year 2 STaR report. Retrieved May 21, 2000, from the World Wide Web: http://www.ceoforum.org/reports.cfm

Coley, R. J., Cradler, J., & Engel, P. K. (1999). Computers and classrooms: The status of technology in U.S. schools. Educational Testing Service Policy Information

Center. Retrieved June 7, 2000, from http://www.ets.org/research/pic/compclass.html

Cook, A. (1999), *Still frame animation: Claymation.* The Learning Partnership. Retreived June 17, 2002 from http://www.tlp.on.ca/kidsmuse/kidsmuse_resource/less_clay.htm

Kulik, C., & Kulik, J. A. (1991). Effectiveness of computer-based instruction. An updated analysis. *Computers and Human Behavior 7*, 75-94.

MacArthur, C. A. (1999). Overcoming barriers to writing: Computer support for basic writing skills. *Reading and Writing Quarterly: Overcoming Learning Difficulties, 15*(2), 169-92.

Mann, D., Shakeshaft, C., Becker, J., & Kottkamp, R. (1999) *West Virginia's Basic Skills/Computer Education Program: An Analysis of Student Achievement.* Santa Monica, CA: Milken Family Foundation.

Marcus, S. (2001). How technology can enrich reading and writing instruction. *Electric School Online.* National School Boards Association. Retrieved June 14, 2002 from **http://www.electronic-school.com/0198f4.html**.

Mastropieri, Margo A. ; Leinart, Amy ; Scruggs, Thomas E. (1999). Strategies to increase reading fluency. *Intervention in School and Clinic, 34*(5), 278-83, 92.

Sivin-Kachala, J., & Bialo, E. R. (1999). *Research report on the effectiveness of technology in schools* (6th ed.). Washington, DC: Software & Information Industry Association.

U.S. Congress. Senate. Committee on Labor and Human Resources. (1998). *Power on! New tools for teaching and learning* (OTA-SET-379). Washington, DC: U.S. Government Printing Office.

Oppenheimer, T. (1997). "The Computer Delusion", *The Atlantic Monthly.* (need city)

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